



Microbead Platform Assay Process

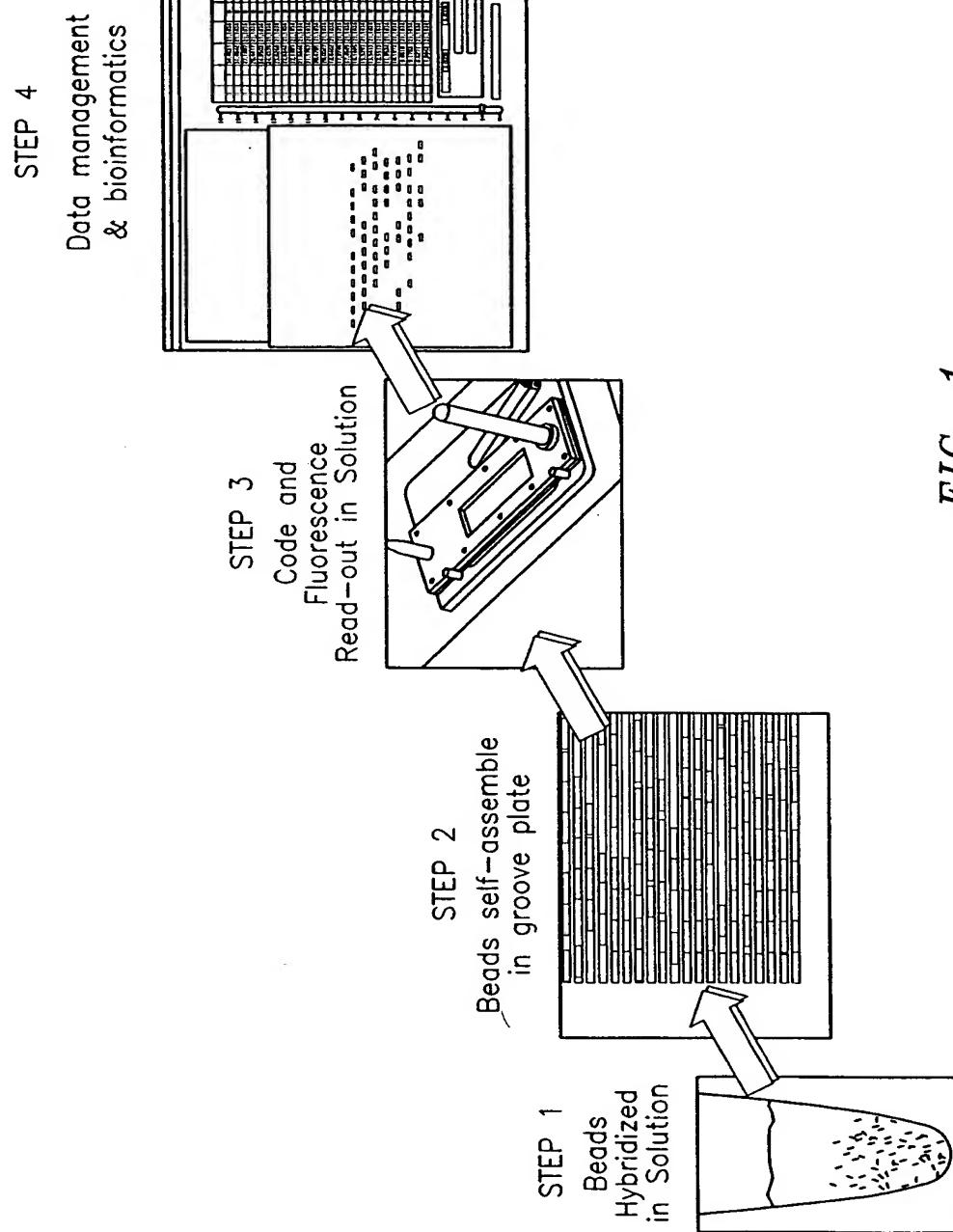


FIG. 1

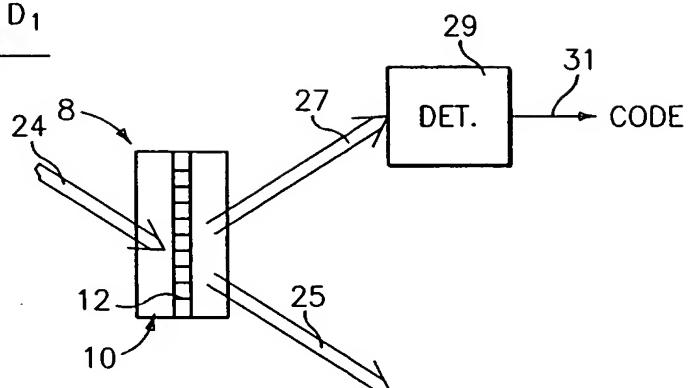
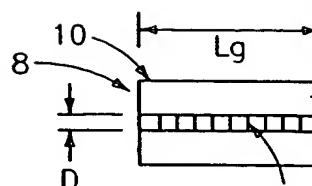
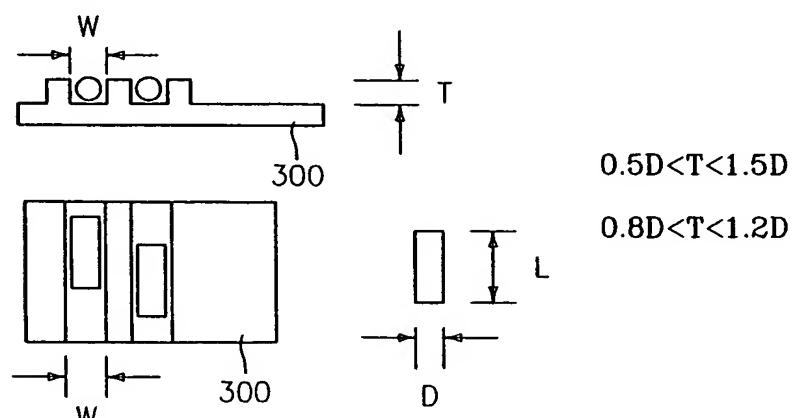
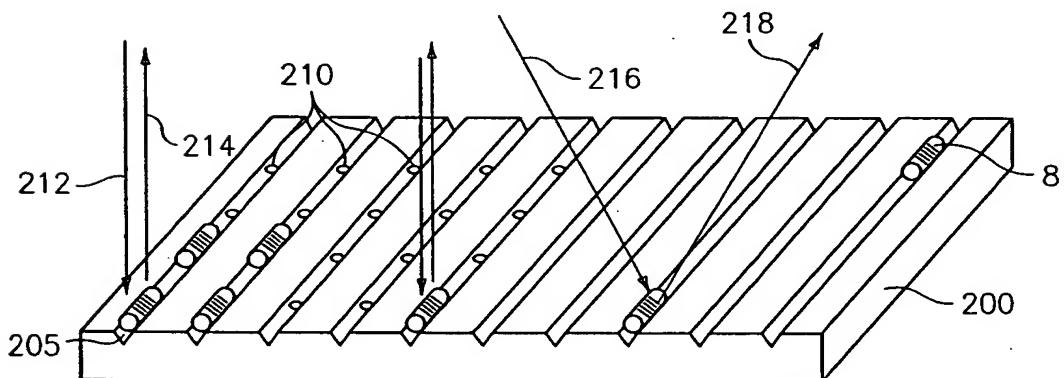


FIG. 3



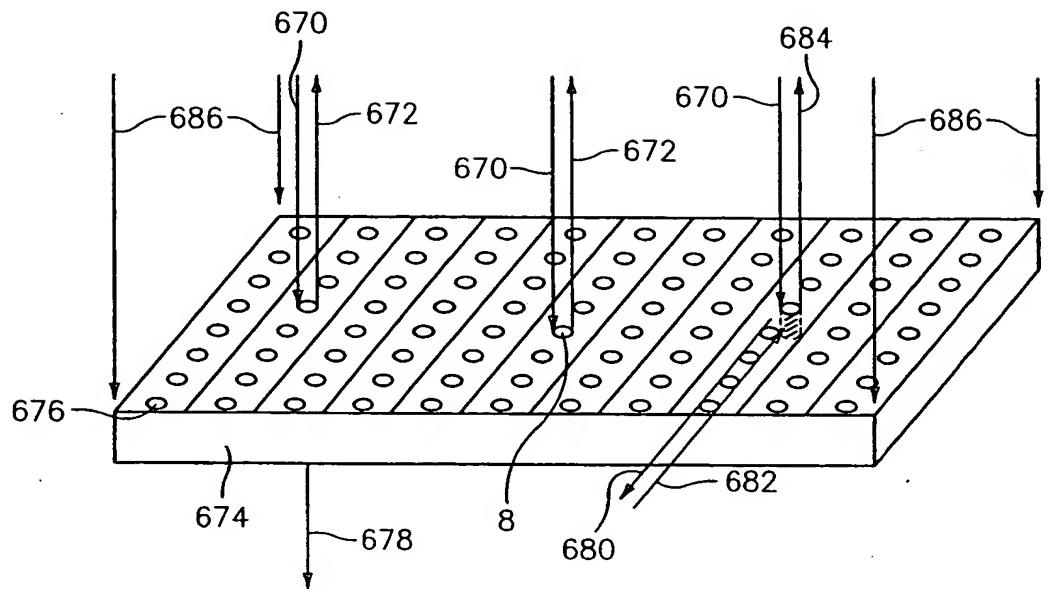


FIG. 6

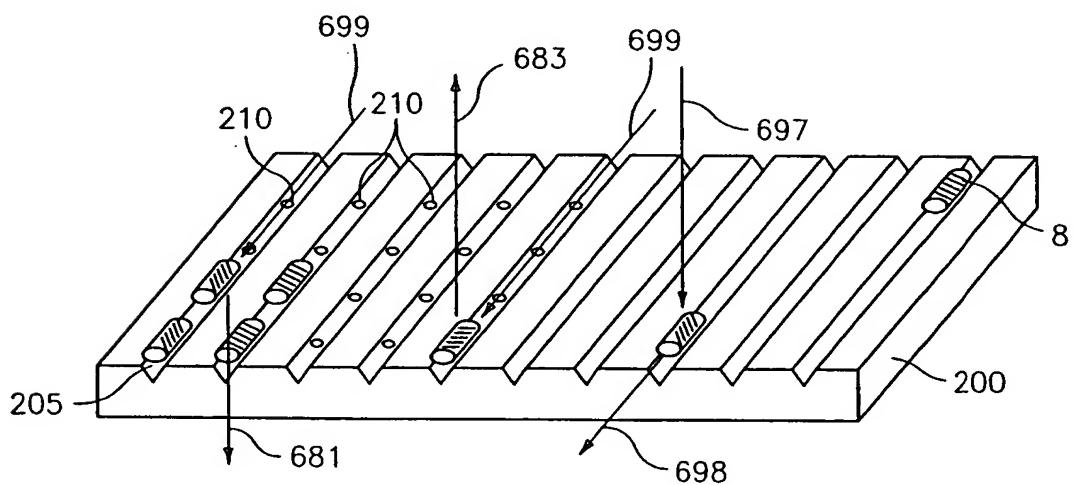
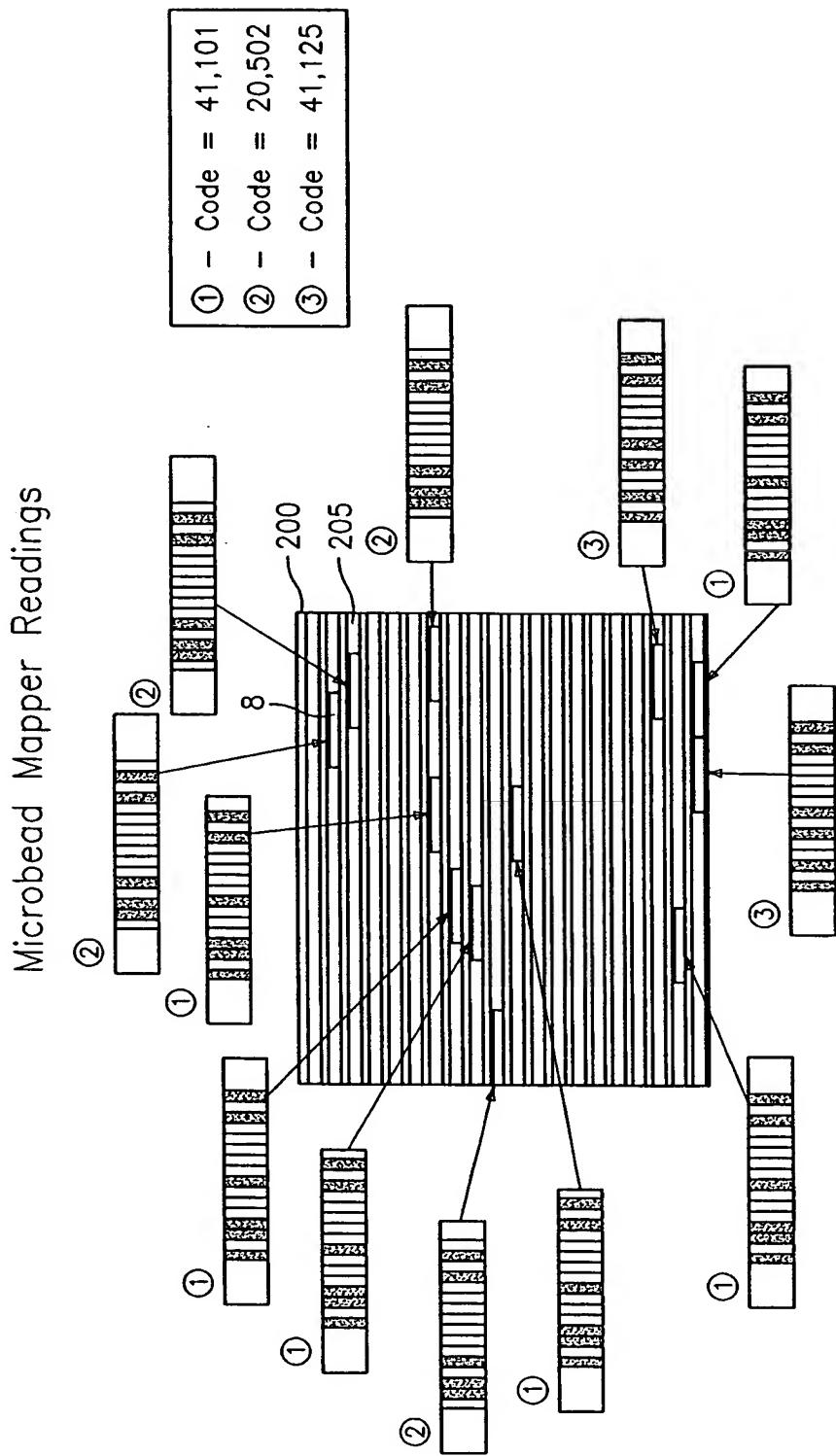


FIG. 7



- Three different codes in this set (16 bit, binary symbology)
- Each code can have a different oligo attached

FIG. 8

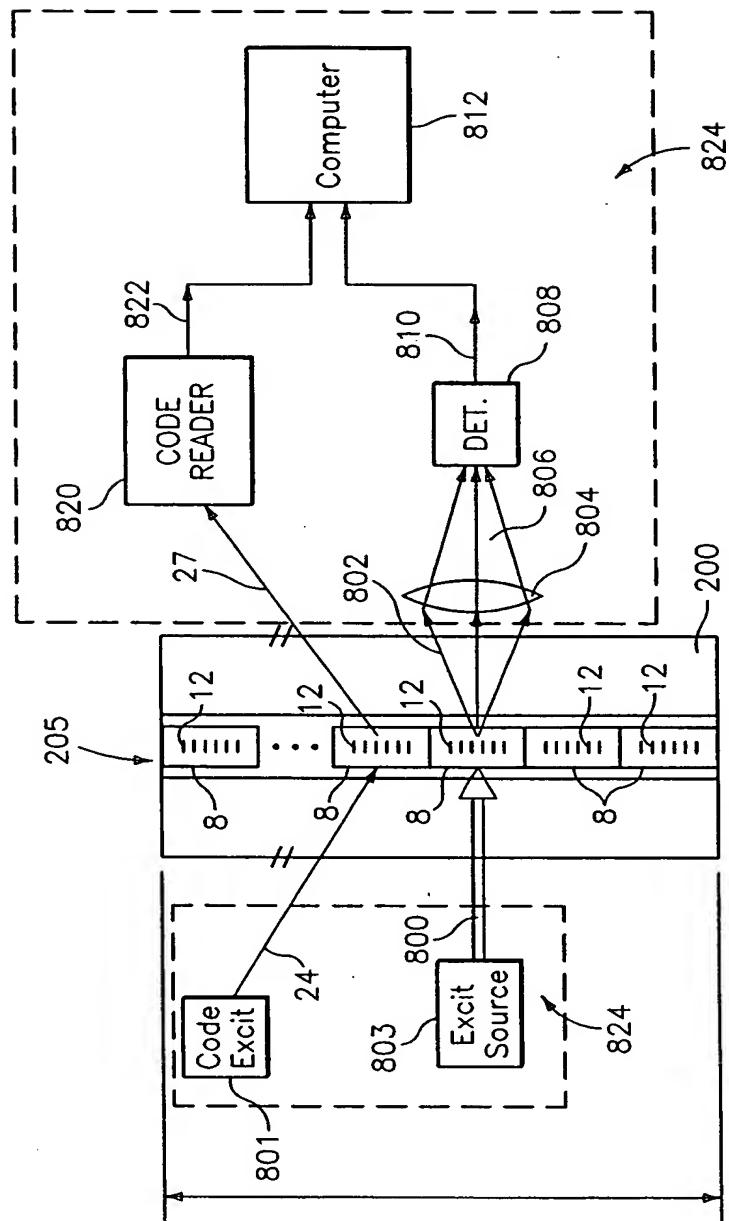


FIG. 8a

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Open Plate Format

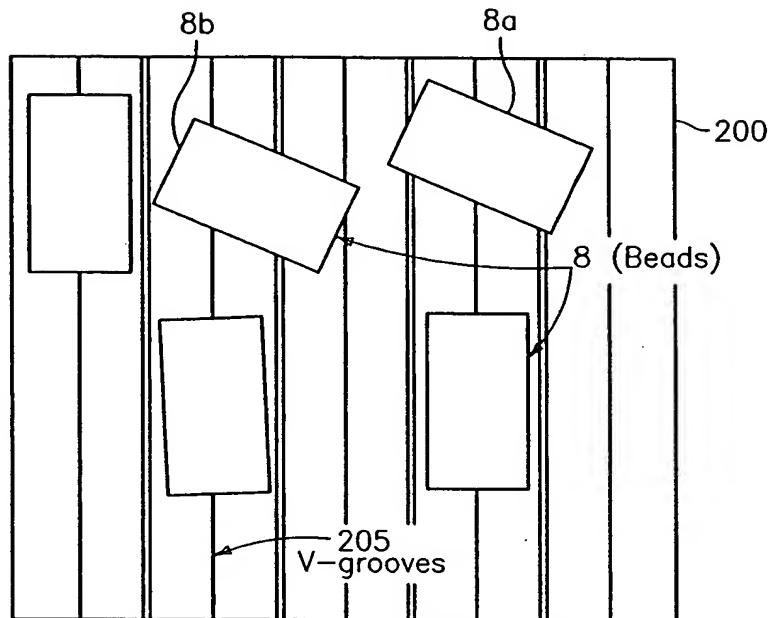


FIG. 9

Two zone cuvette

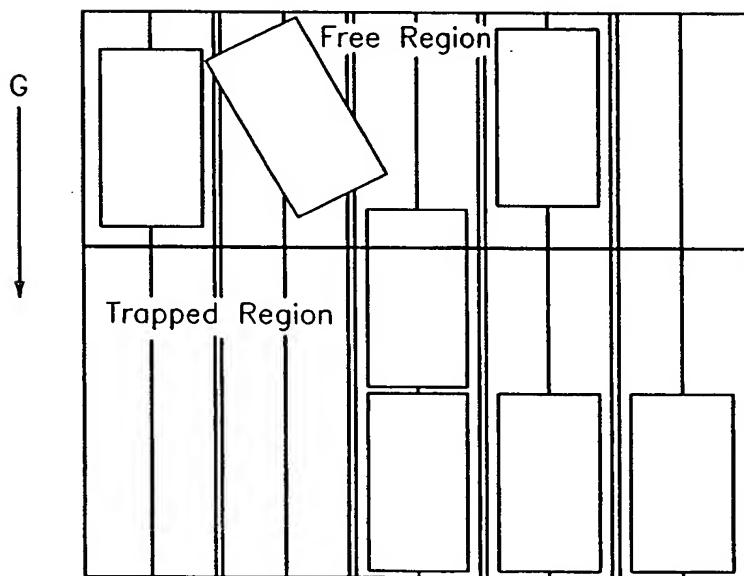


FIG. 17

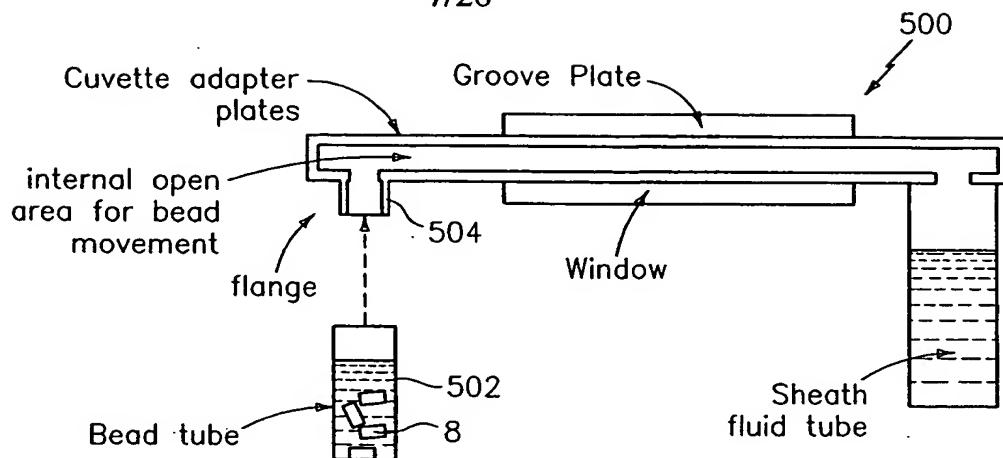


FIG. 10

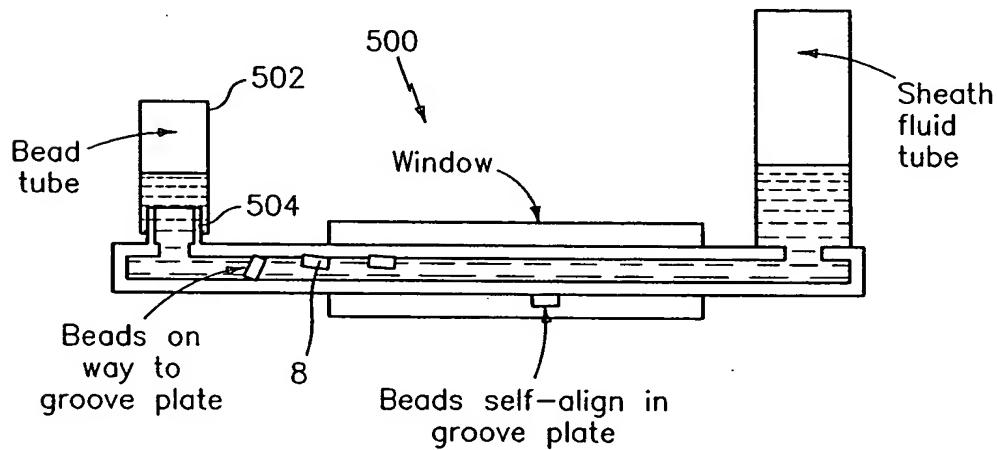


FIG. 11

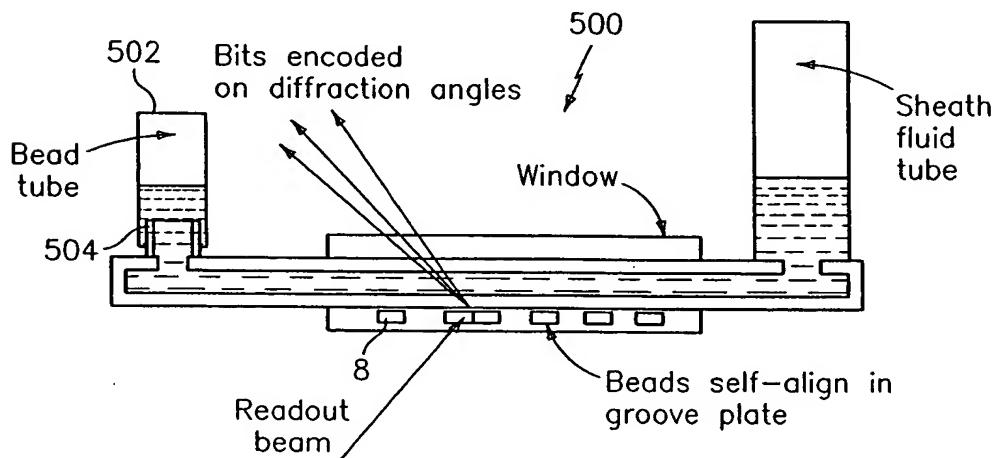


FIG. 12

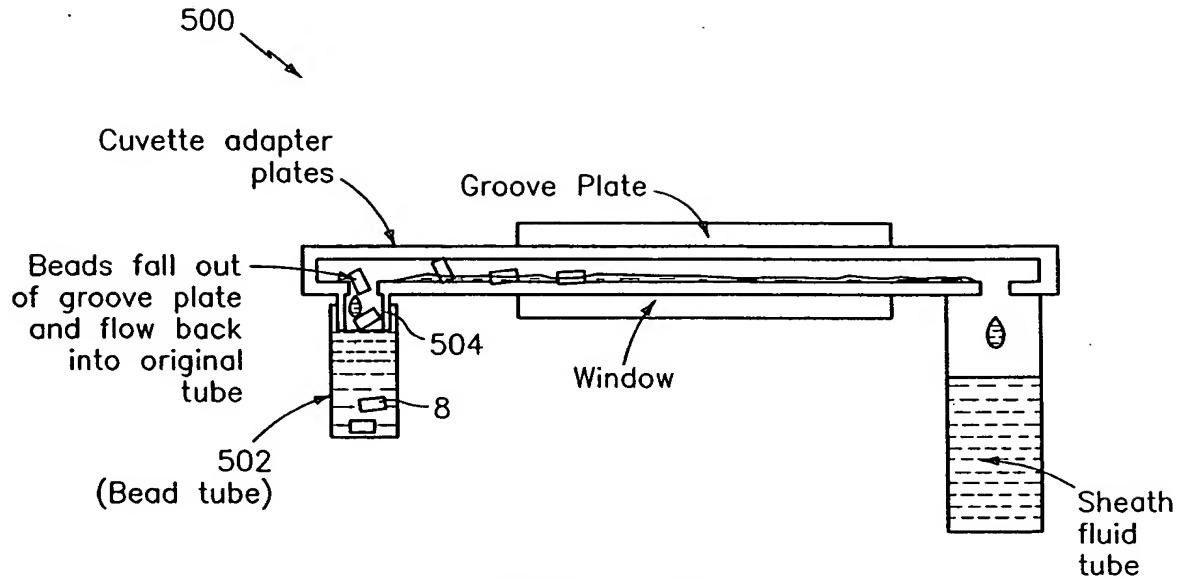


FIG. 13

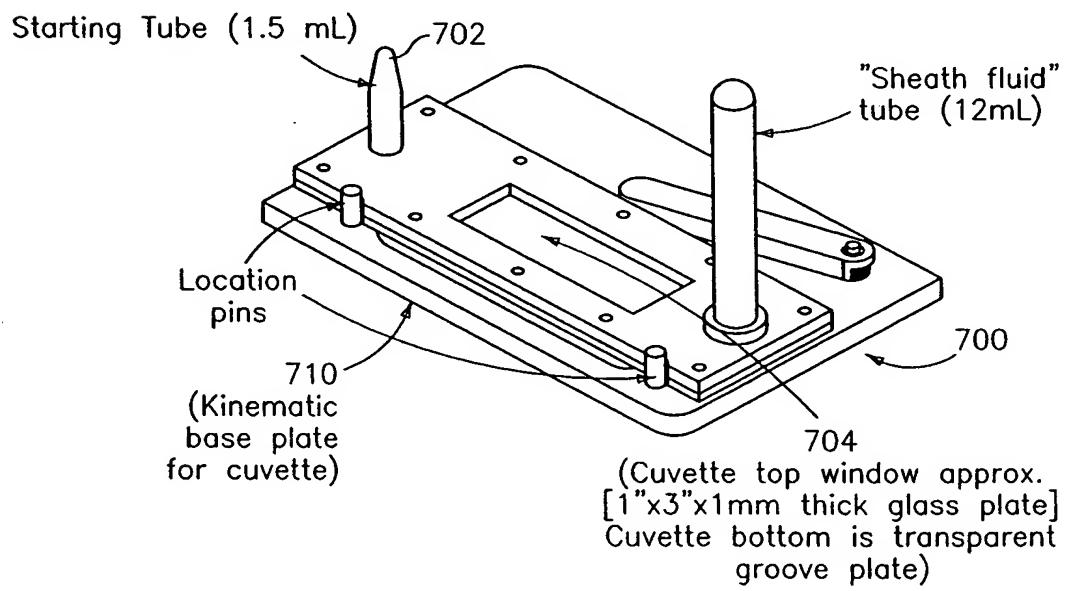


FIG. 14

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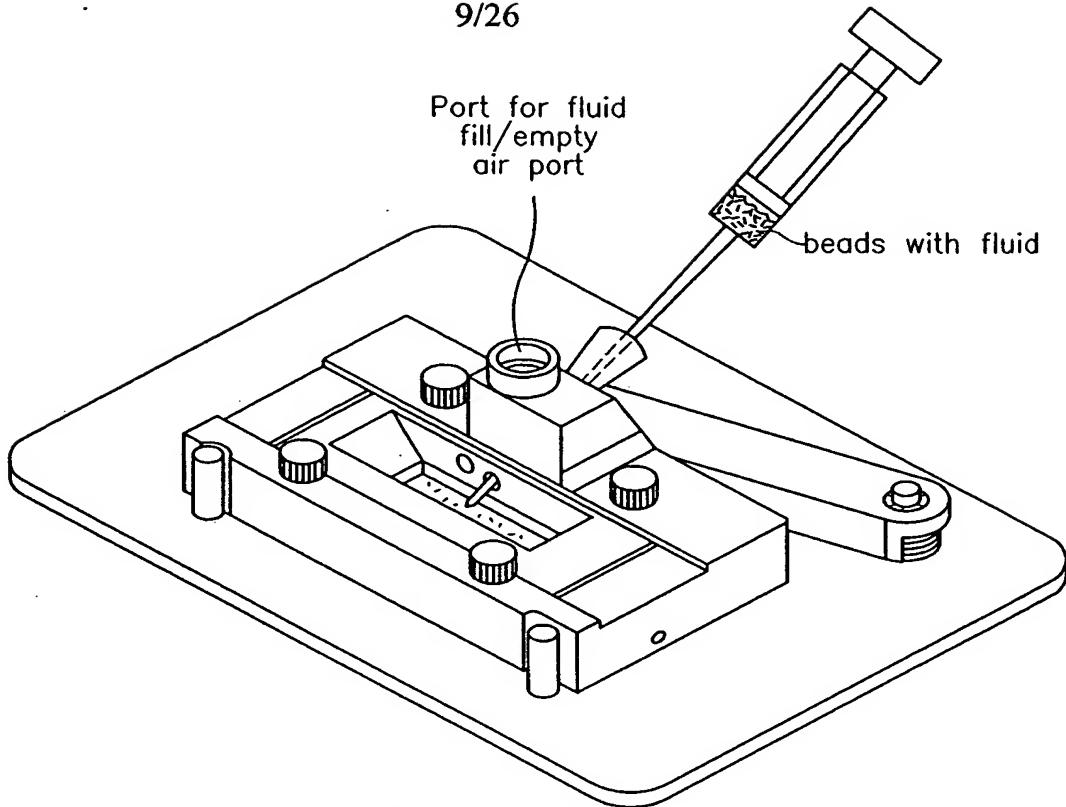


FIG. 15

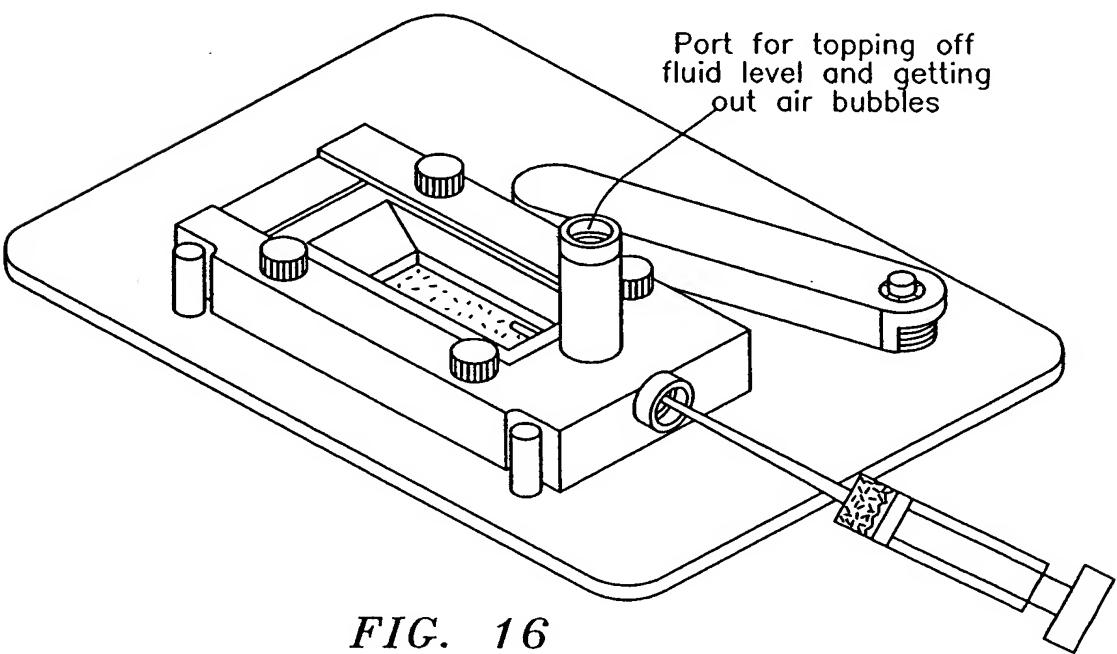


FIG. 16

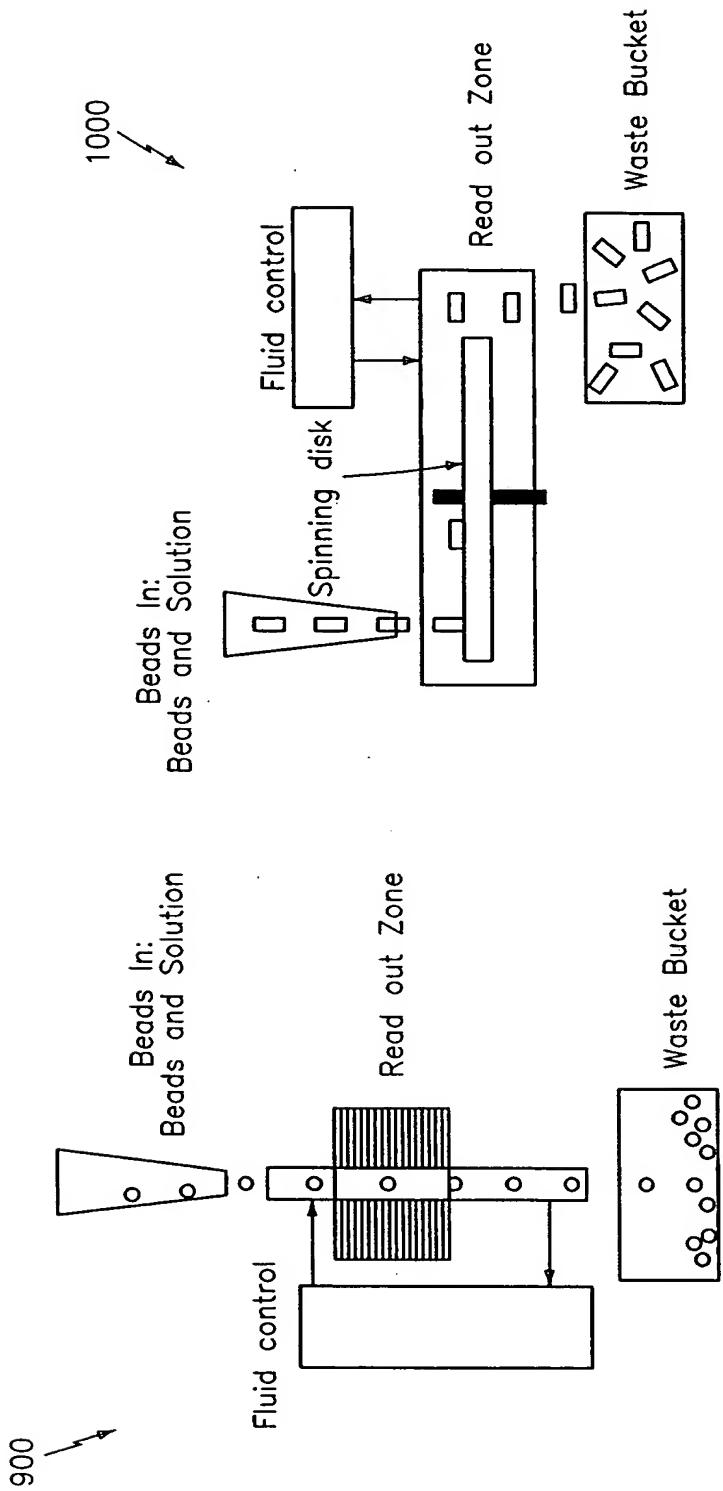


FIG. 18(a)

FIG. 18(b)

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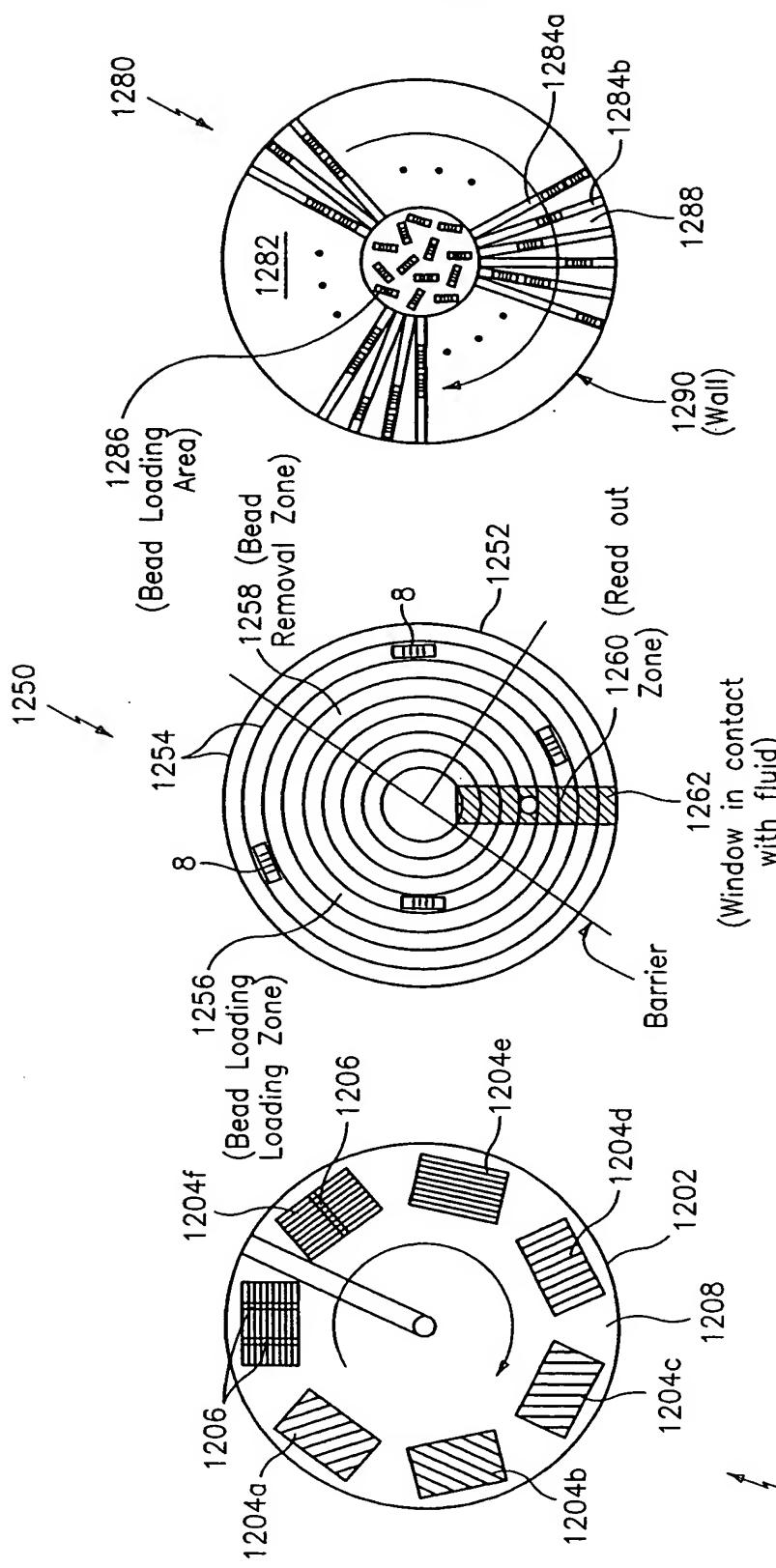


FIG. 19(b)

FIG. 19(a)

FIG. 19(c)

"Cytometer-like" bead reader

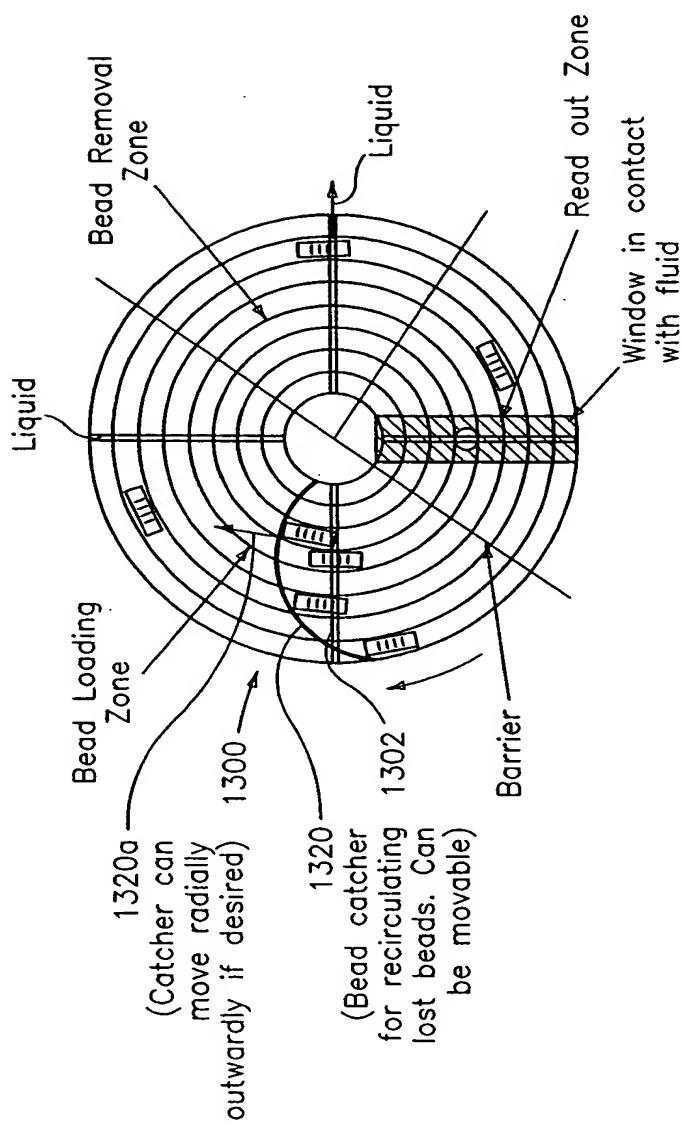


FIG. 20(a)

FIG. 20(b)

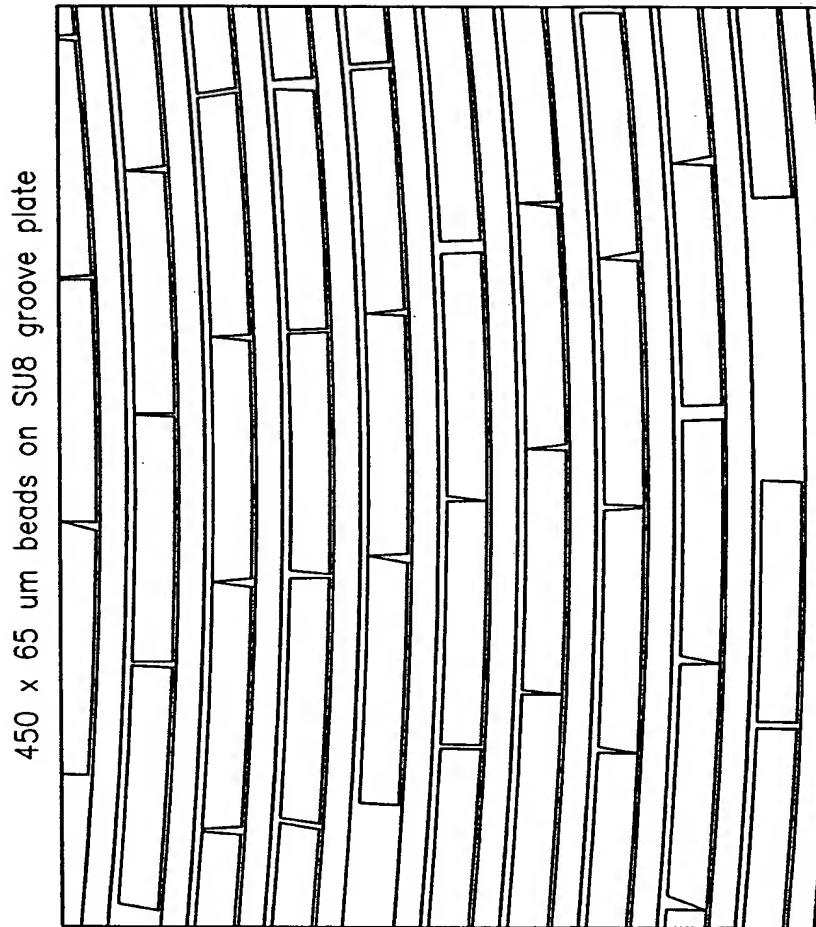


FIG. 21

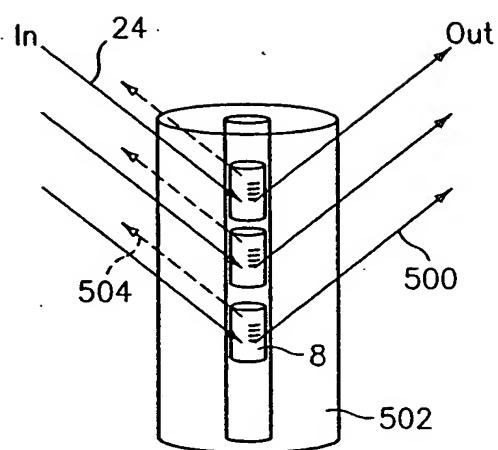


FIG. 22

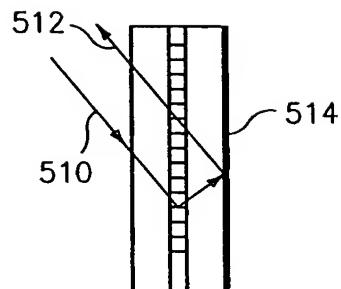


FIG. 49

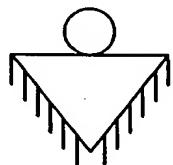
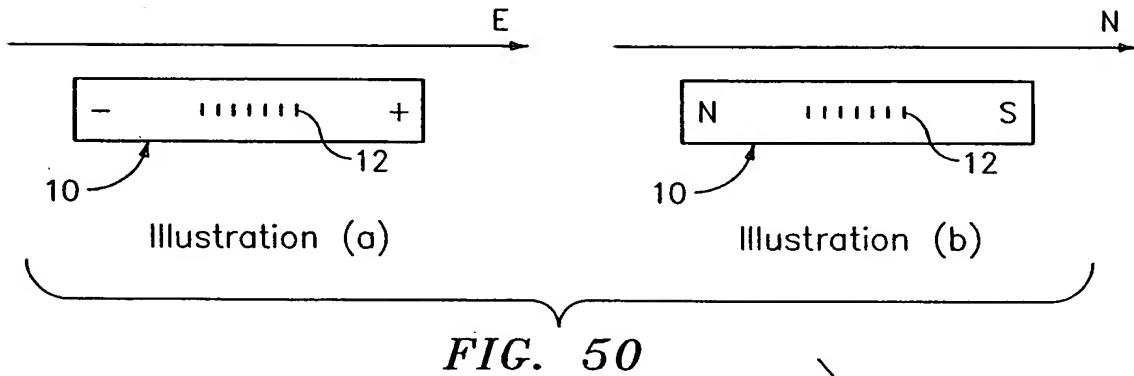


FIG. 51

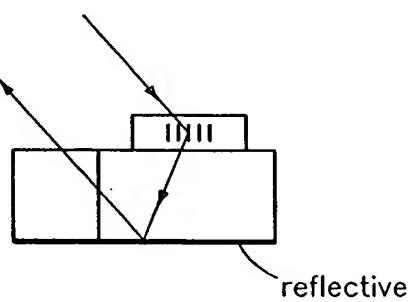


FIG. 52

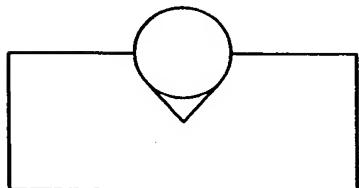


FIG. 53

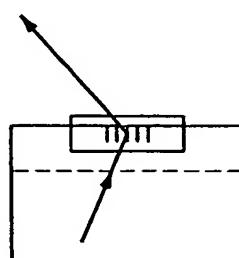


FIG. 54

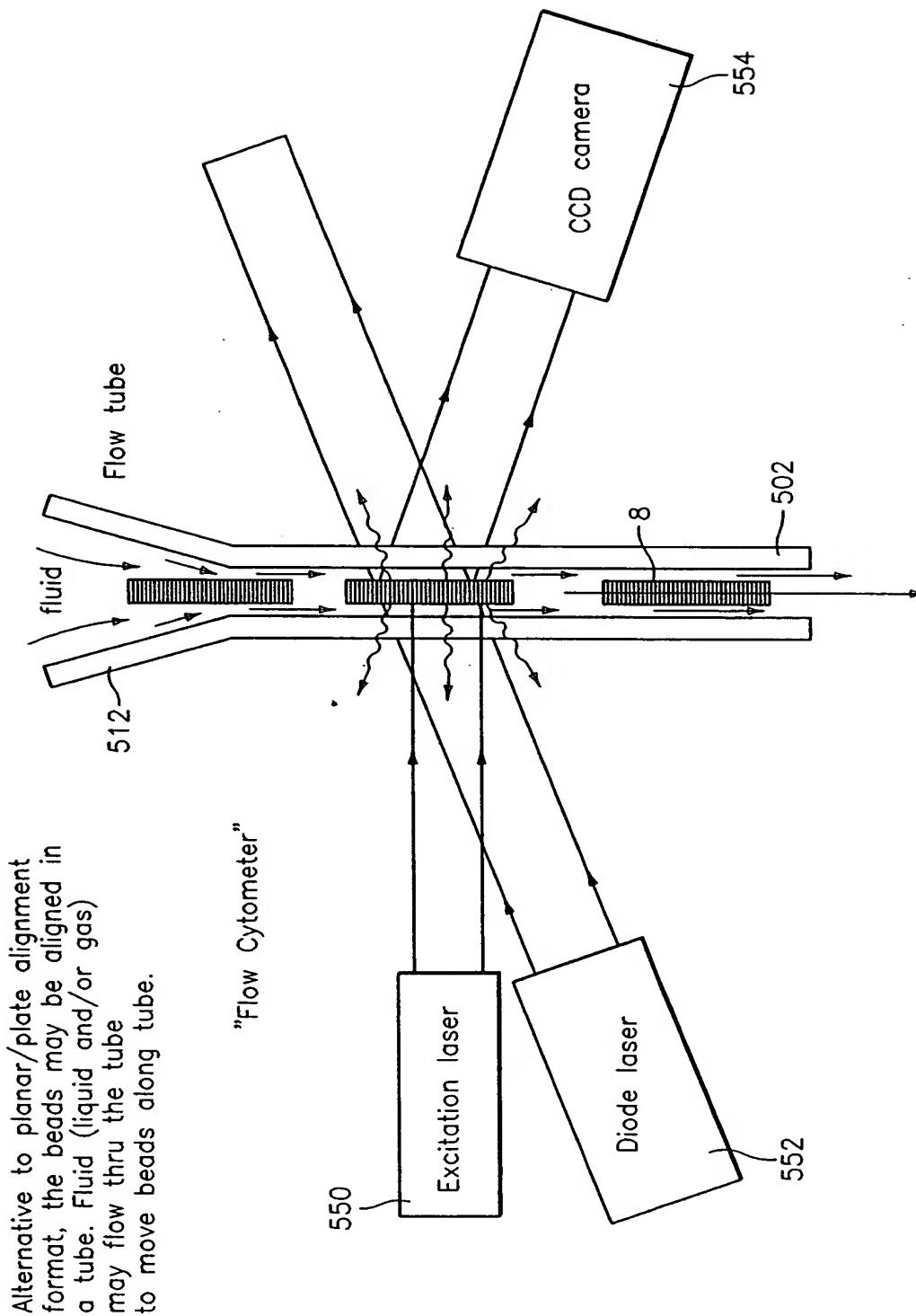


FIG. 23

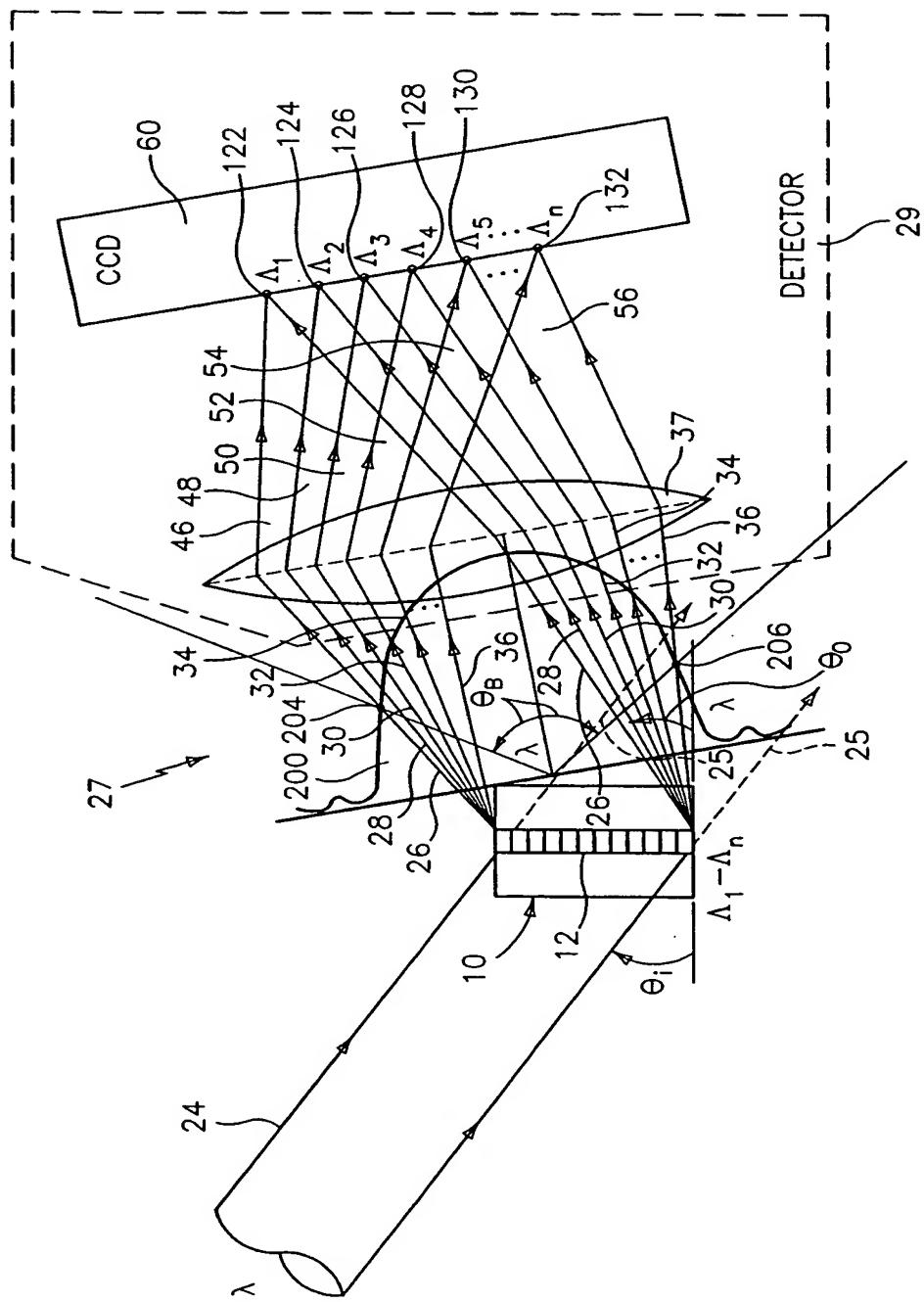


FIG. 24

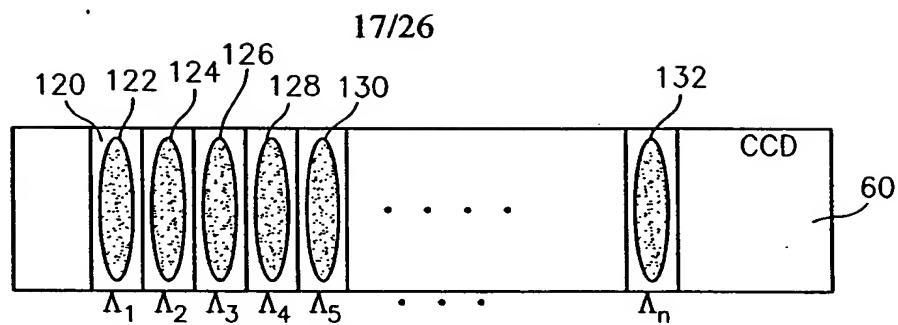


FIG. 25(a)

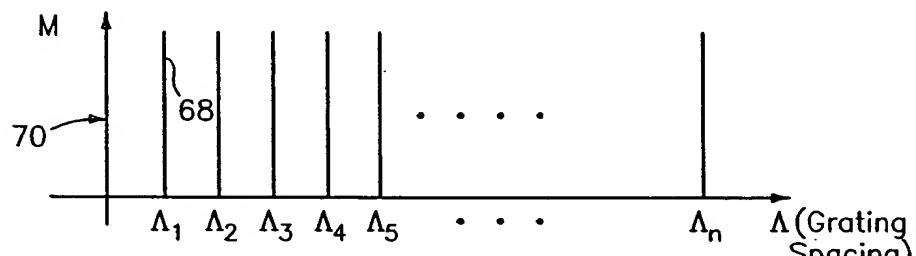
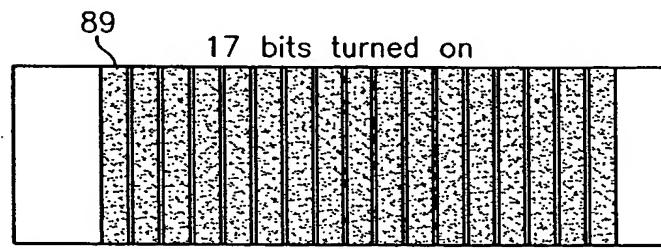
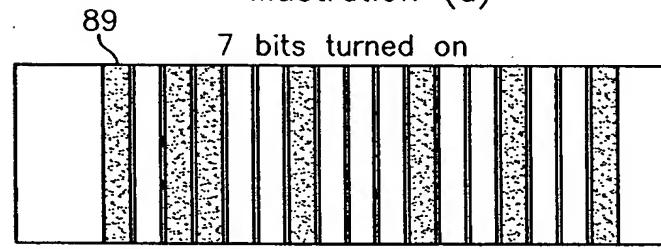


FIG. 25(b)



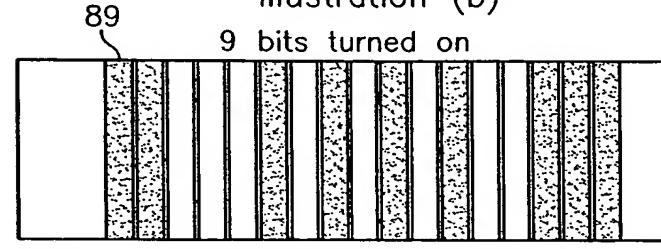
Bits: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Illustration (a)



Bits: 1 0 1 1 0 0 1 0 0 0 1 0 0 1 0 0 1

Illustration (b)



Bits: 1 1 0 0 0 1 0 1 0 1 0 1 0 0 1 1 1

Illustration (c)

FIG. 26

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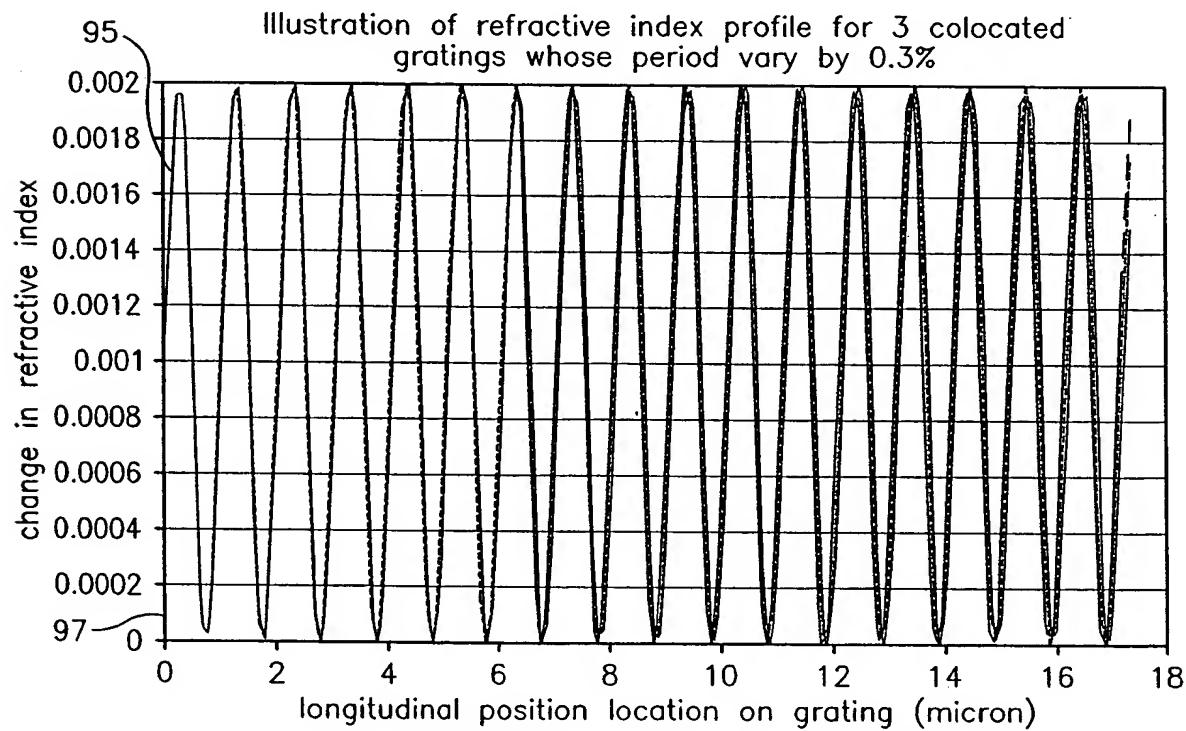
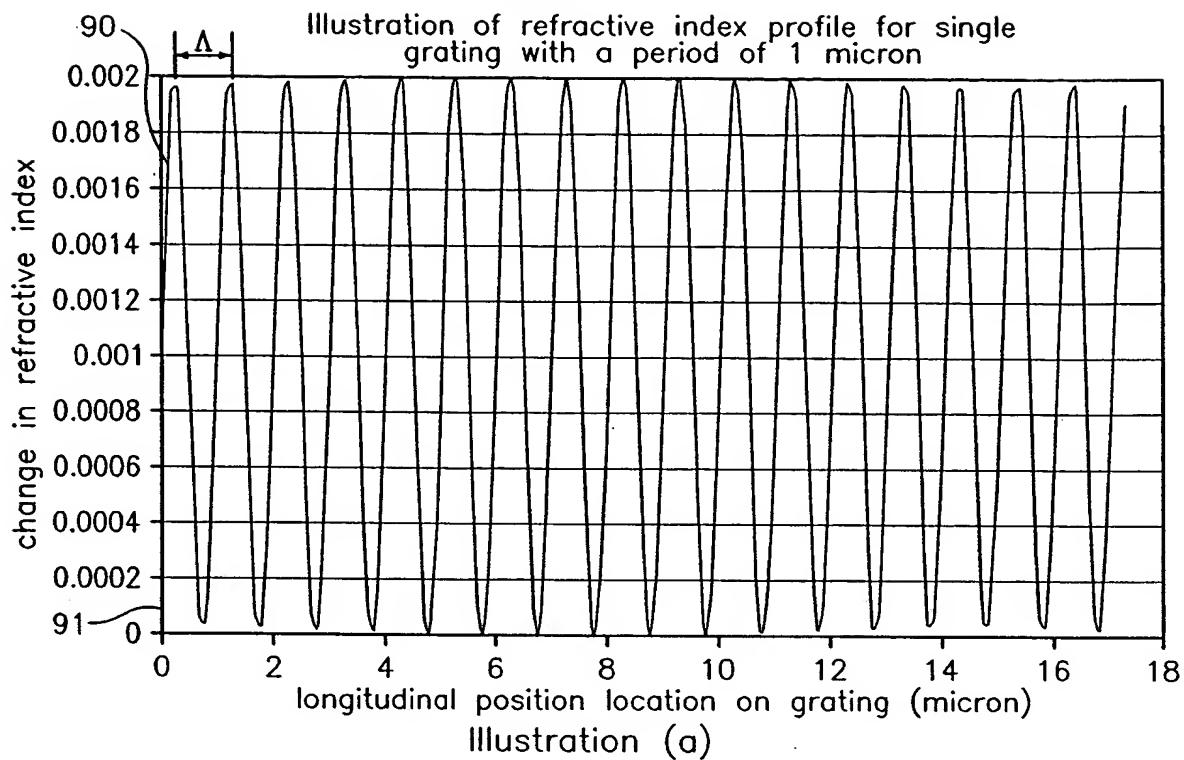


FIG. 27

Illustration (c)

--- grating 1 - - - - grating 2 —— grating 3

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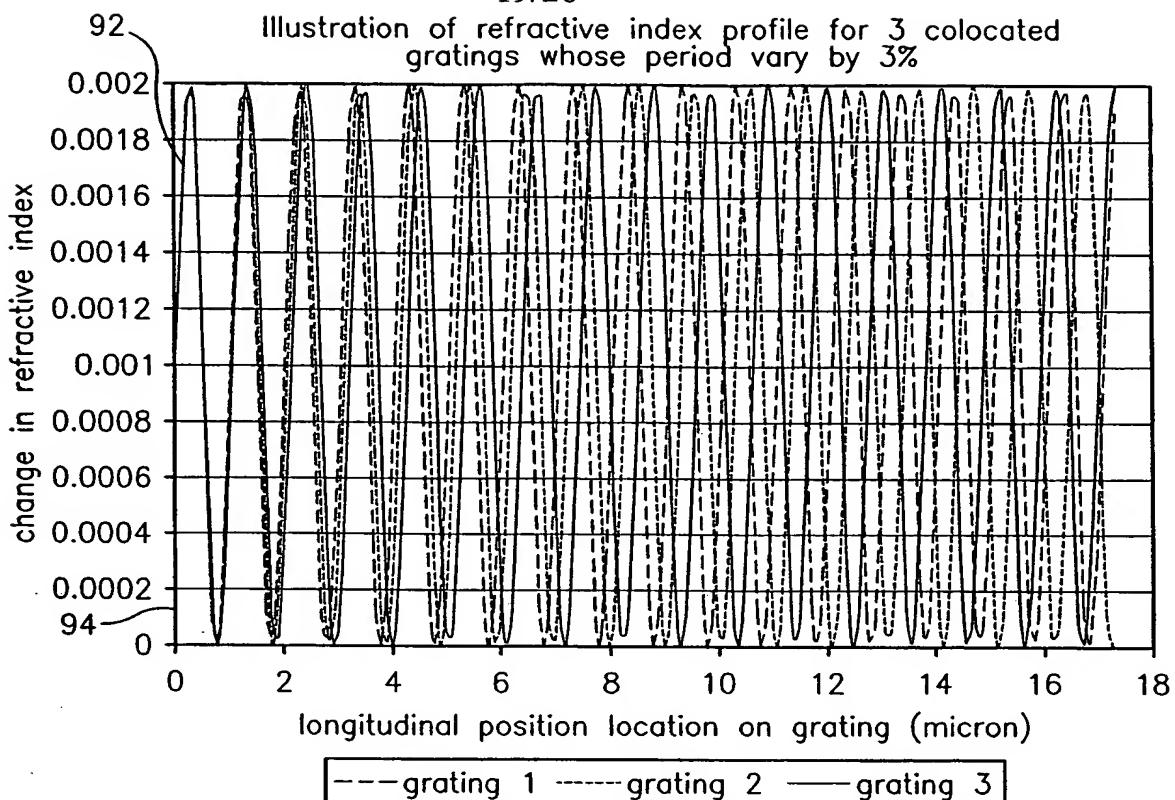


Illustration (b)

Index modulation caused by superposition of 3 gratings where the pitch between each grating varies by 3%.

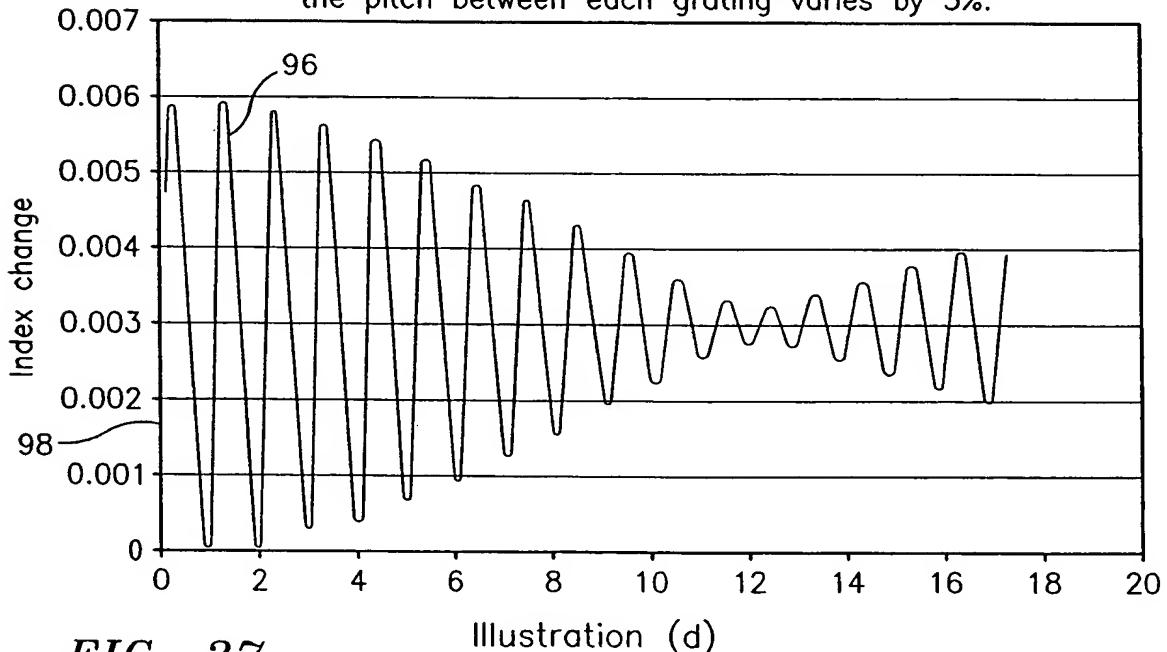


Illustration (d)

FIG. 27

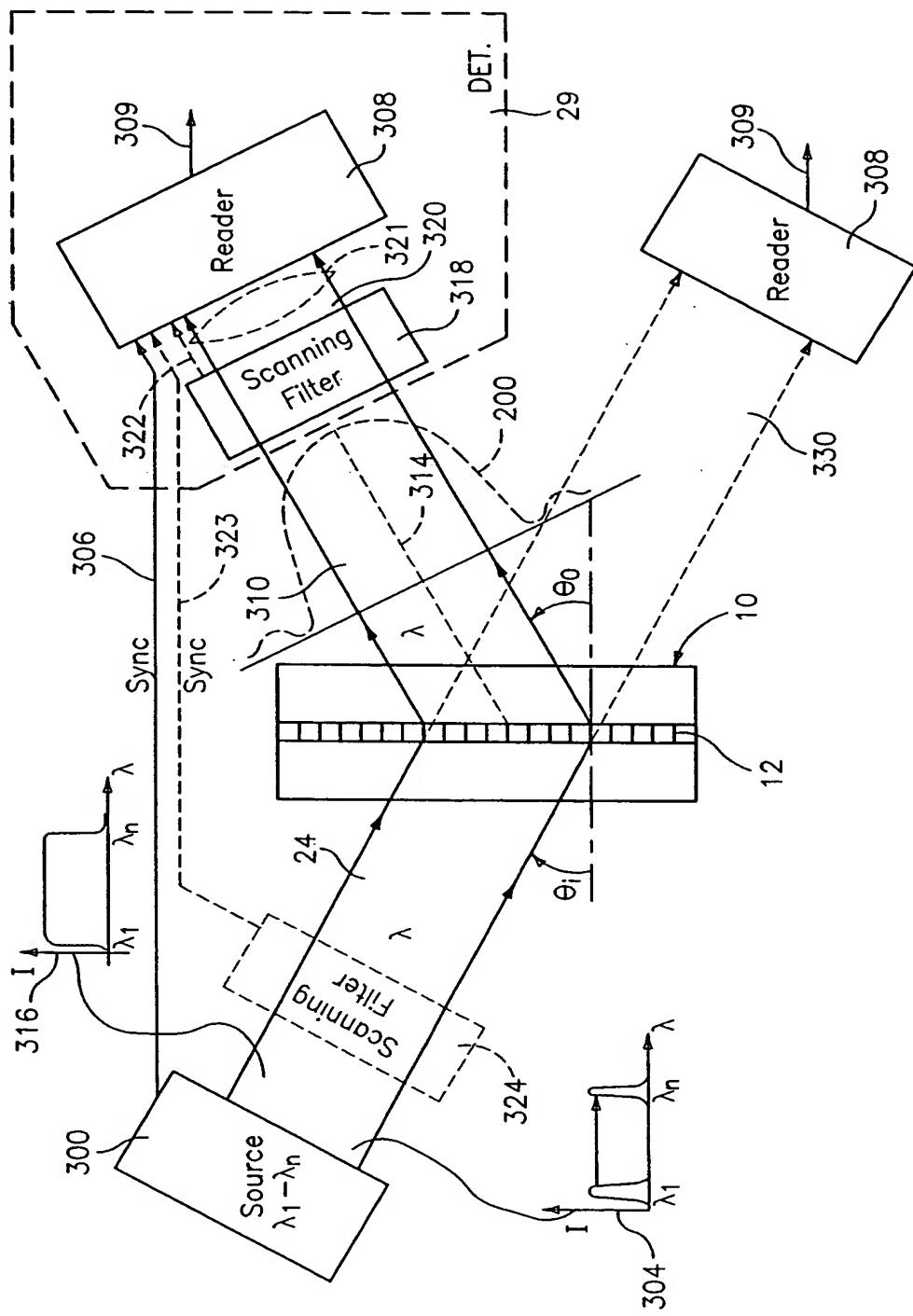
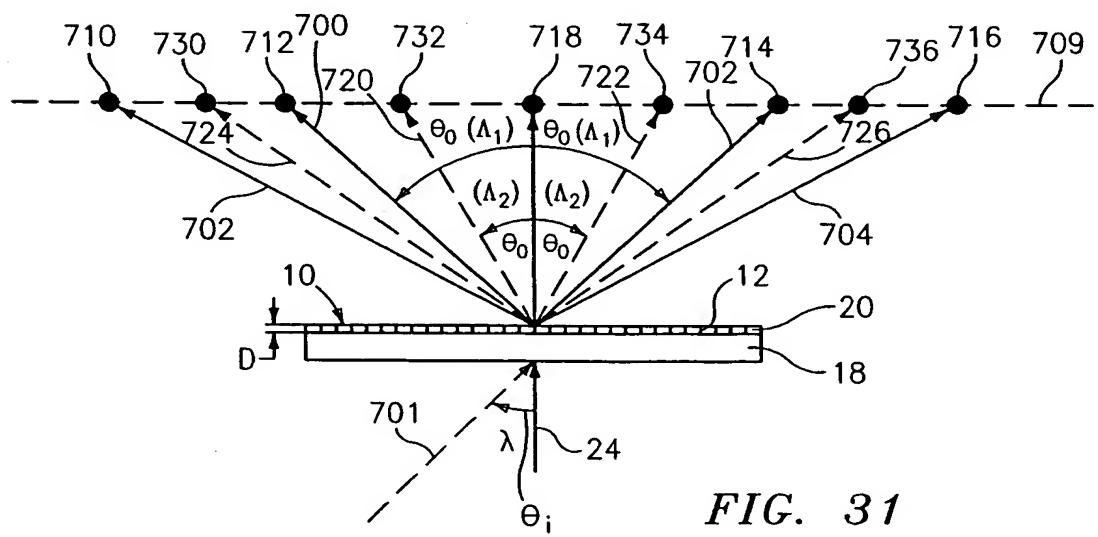
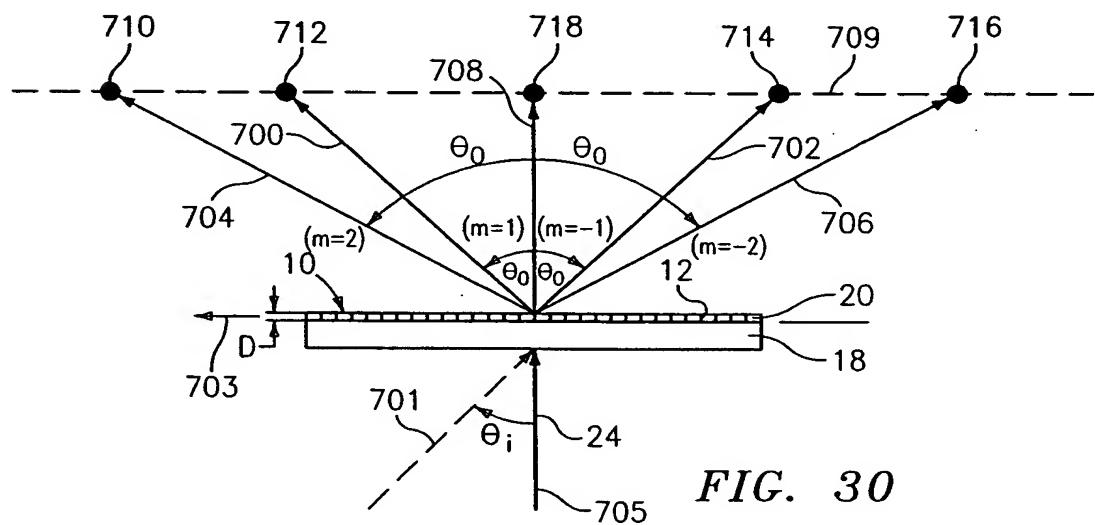
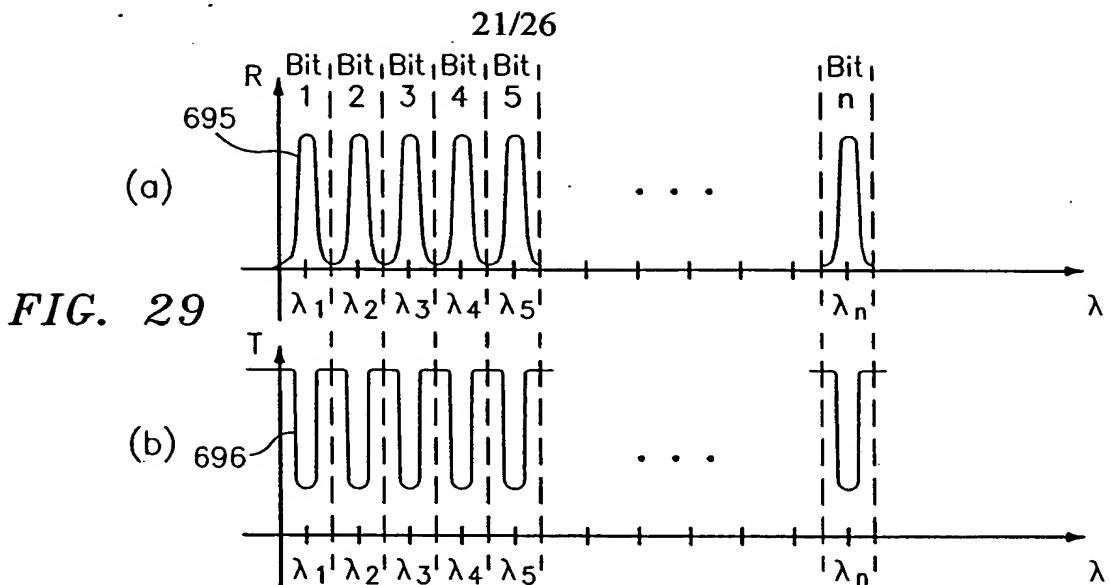


FIG. 28



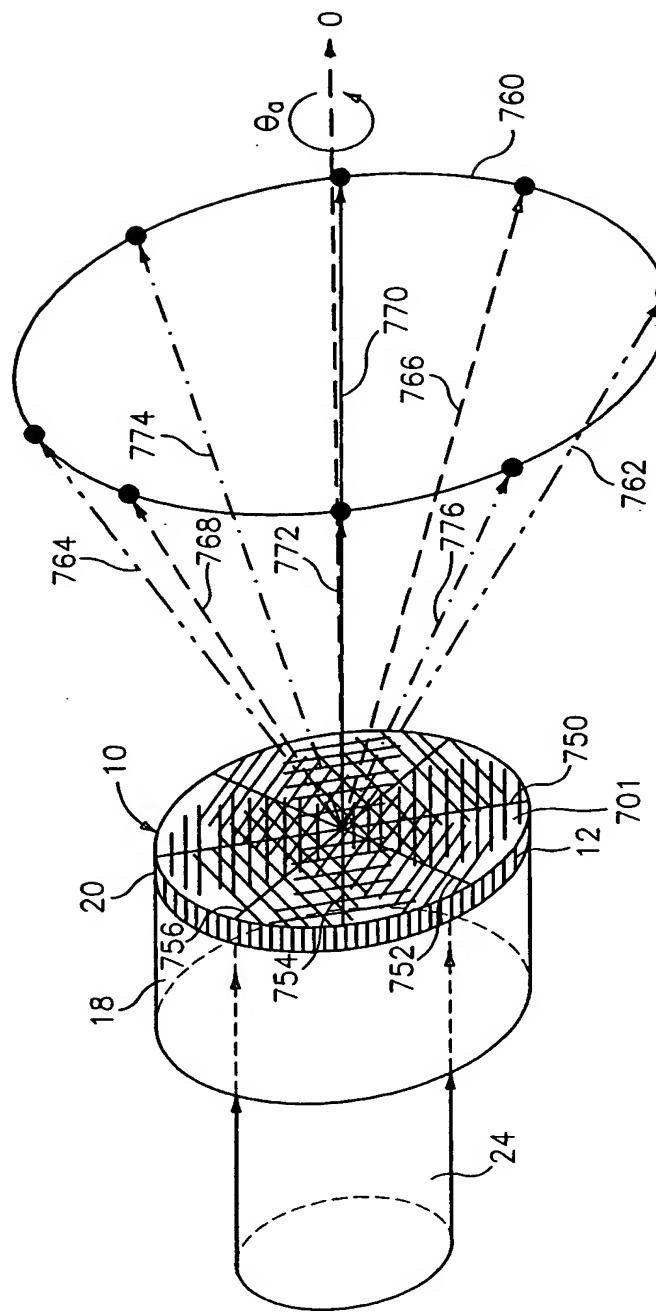


FIG. 32

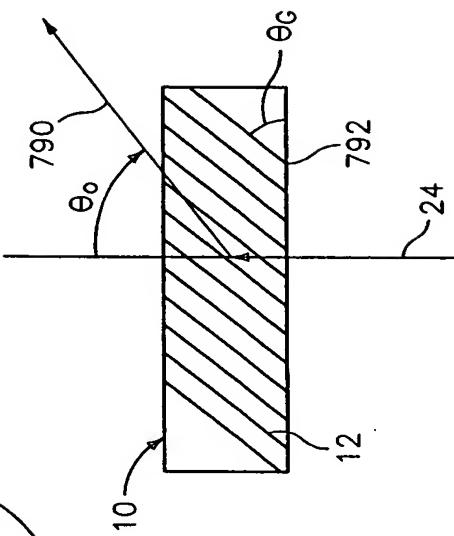


FIG. 33

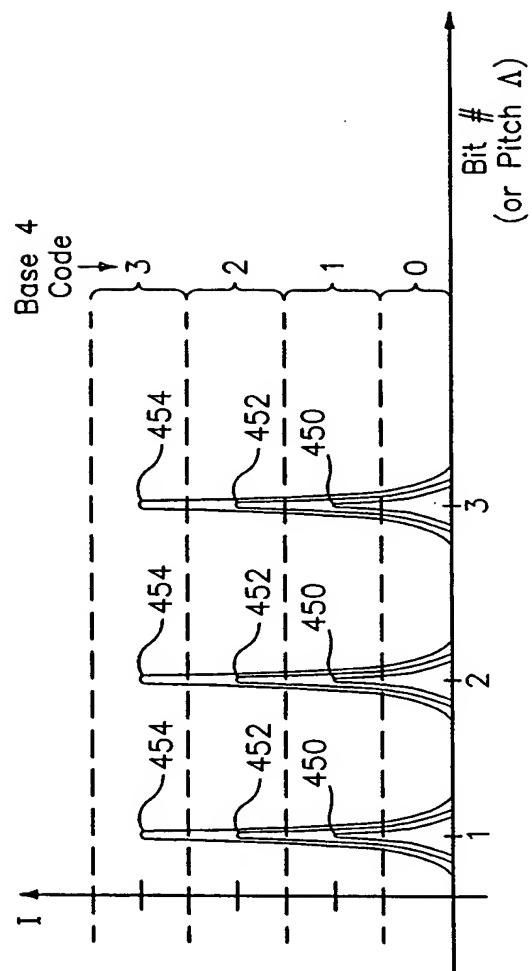


FIG. 34

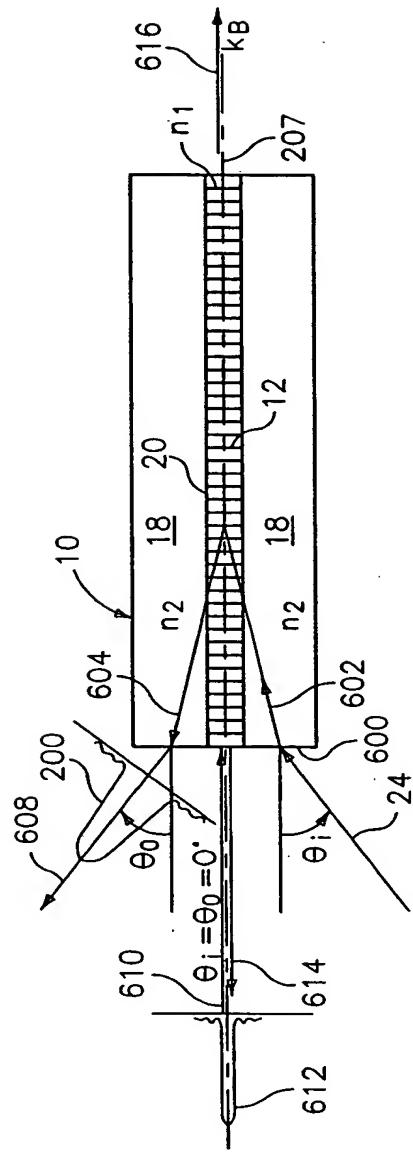


FIG. 35

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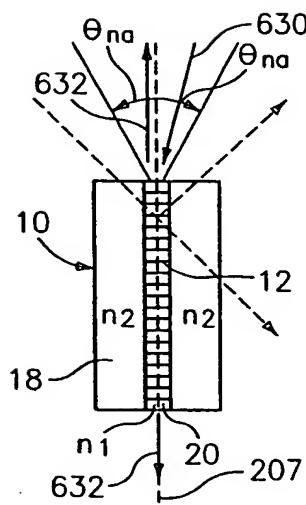


FIG. 36

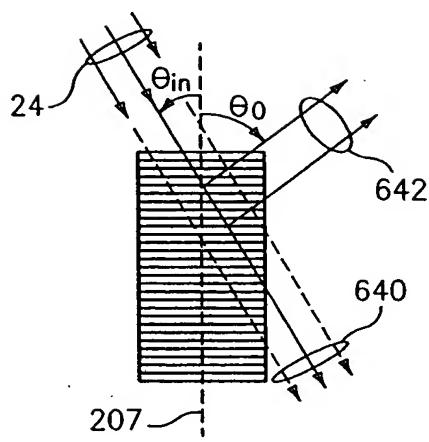
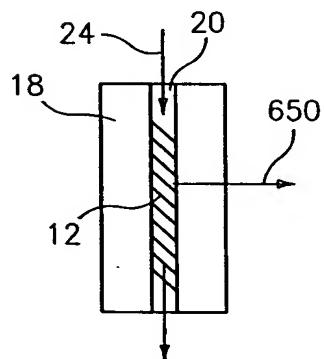
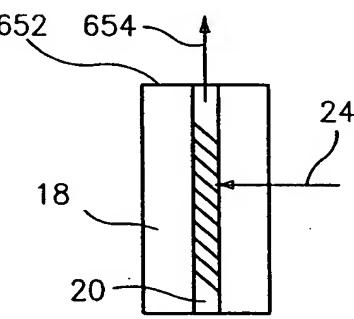


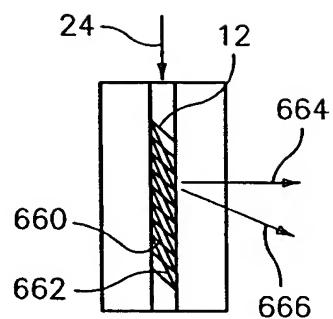
FIG. 37



Illustration(a)



Illustration(b)



Illustration(c)

FIG. 38

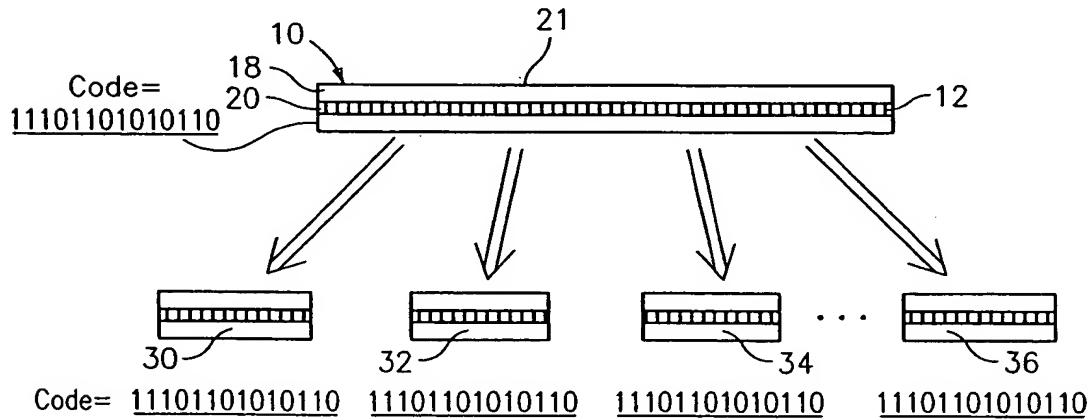
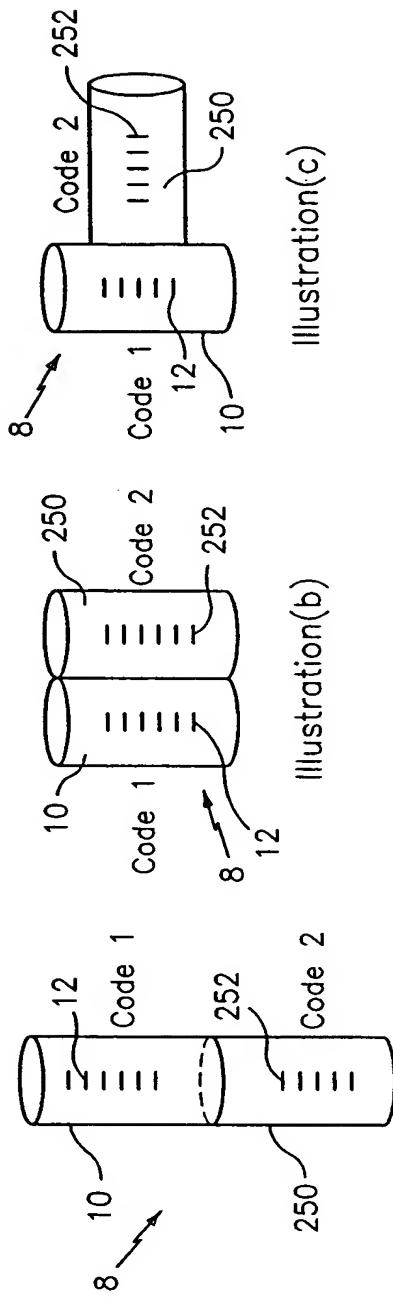


FIG. 40



Illustration(a)

Illustration(b)

Illustration(c)

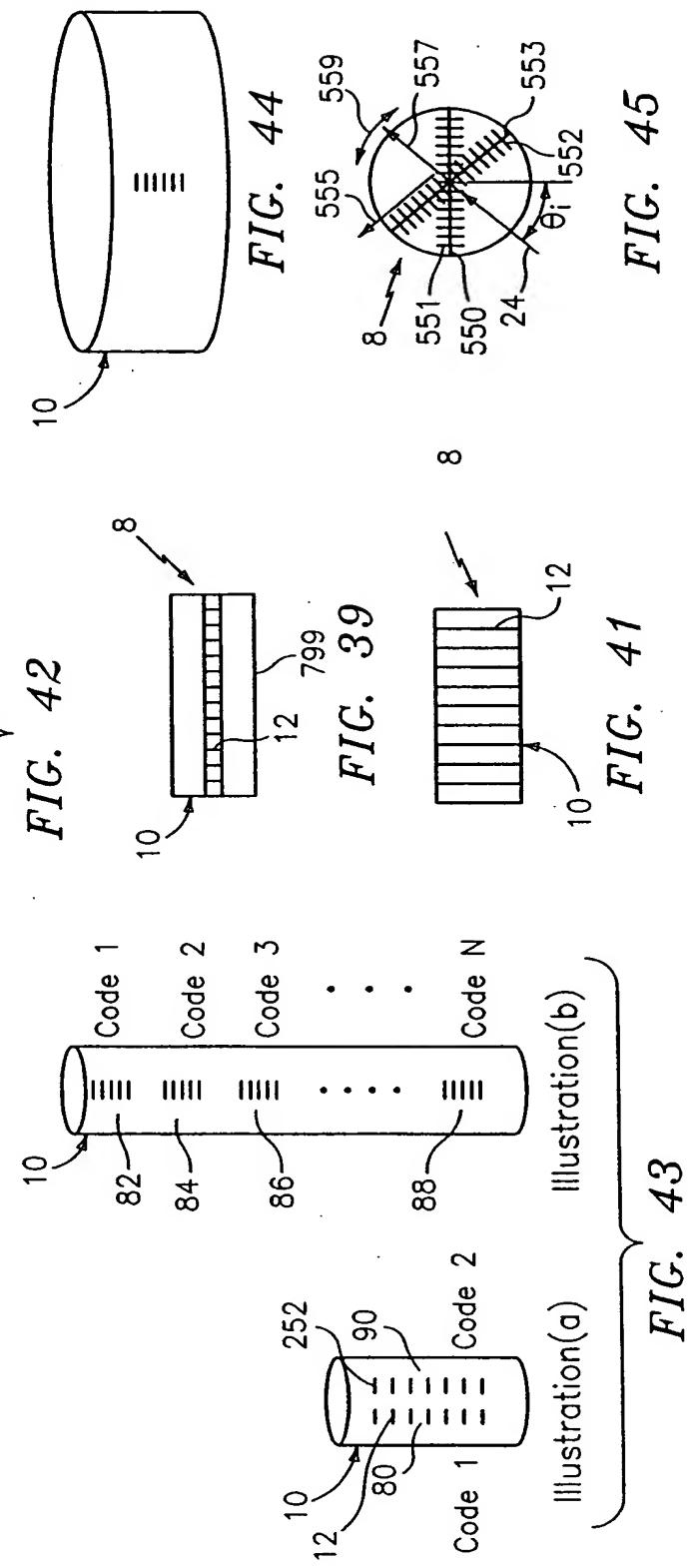


FIG. 43

FIG. 45

FIG. 41

Illustration(b)

Illustration(a)

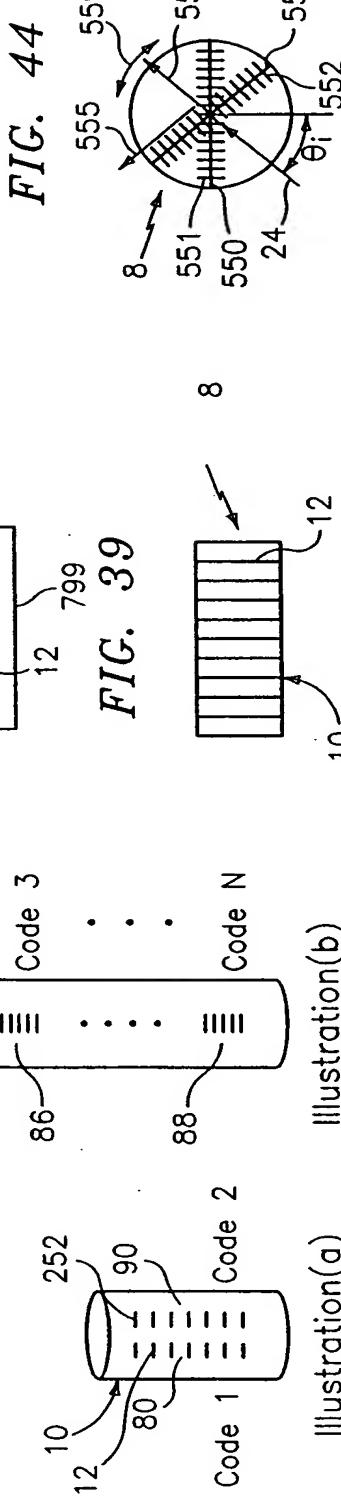


FIG. 44

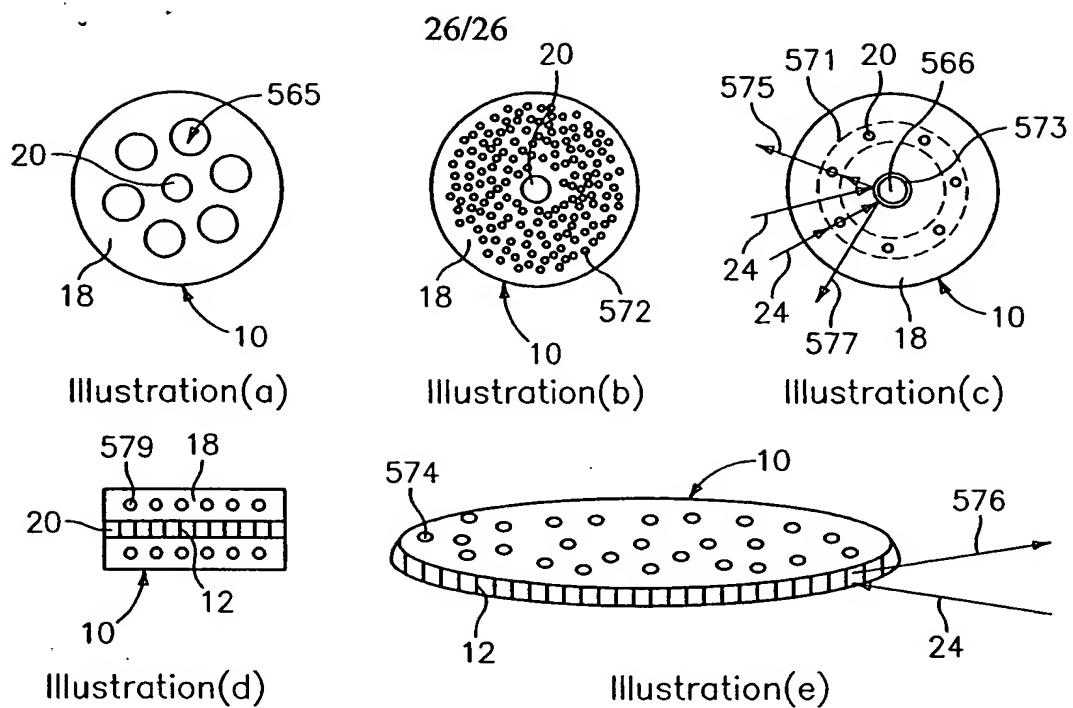


FIG. 46

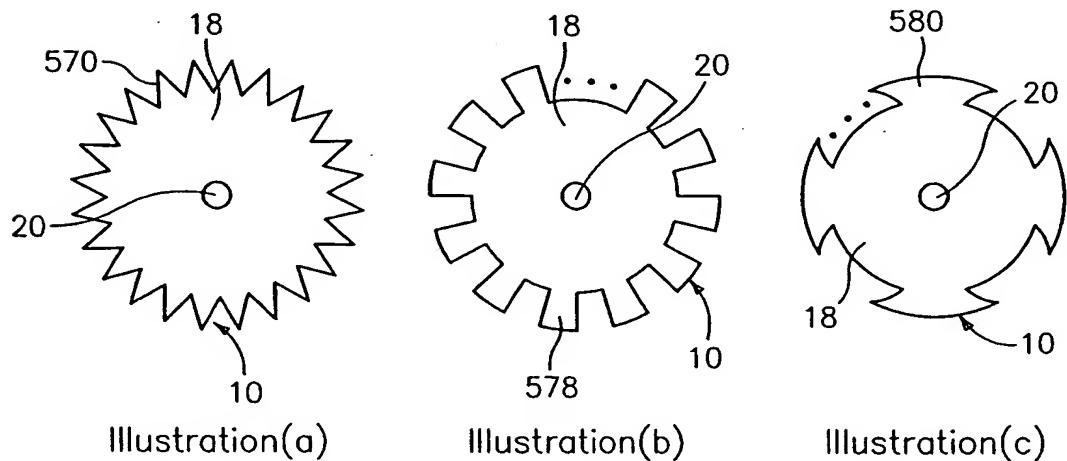


FIG. 47

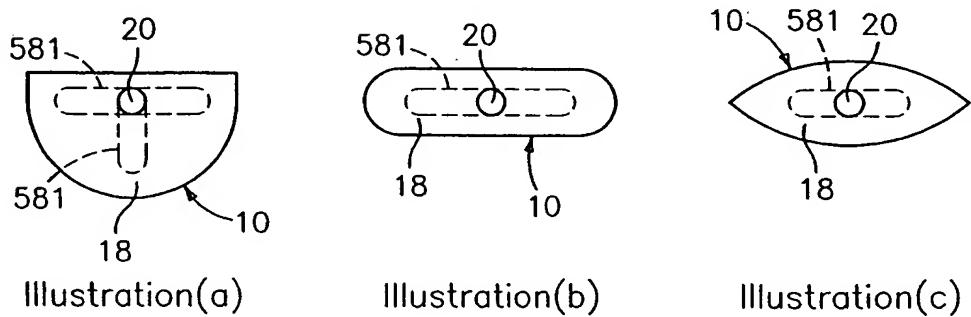


FIG. 48